REMARKS

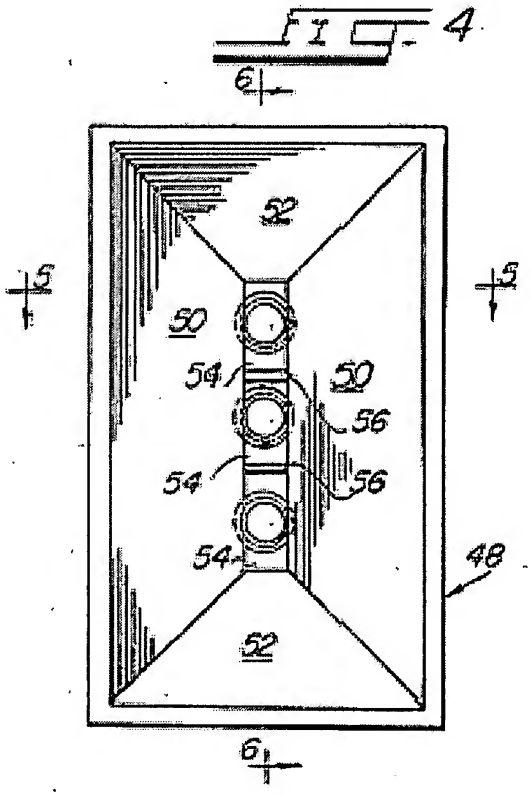
In an Action mailed 23 August 2007 the Examiner rejected claims 1-3, 10-12 and 14 under 35 USC 102(a) as anticipated by Danley, U.S. Pat. 4,845,759. Claims 4, 9 and 15 were rejected under 35 USC 103(a) as obvious over the Danley '759 patent in view of Ohta, U.S. Pub. Pat. Doc. 2001/0016045. Claims 6-8 and 13 were rejected over the Danley '759 patent in view of Danley, U.S. Pat. 6,411,718.

Claims 1, 3, 10, 12 and 13 have been amended. The amendments to claims 1, 3 and 10 are directed to further define the invention and to more particularly distinguish the claims over the prior art. The amendments to claims 12 and 13 are narrowing but minor in substance. A new independent claim, claim 16 has been introduced which represents a substantially new definition of the invention. Claims 1-4 and 6-17 are active.

The Amendment to claim 1 provides that the limitation relating to the summing throat is further defined by requiring the summing throat exhibit an increasing cross sectional area in the direction of sound propagation through the summing throat. The claim now further requires that each successive radiating port into the summing throat be located at a point along the summing throat of greater cross sectional area. This amendment is supported by the disclosure at paragraph [0020]. The amendment to claim 3 provides that the terminating ends of the radiating ports be located along sides of the horn progressing from the base end of the summing throat toward the mouth. This amendment is supported at paragraph [0021] of the disclosure. The sound axis of the ports is transverse to the sound axis of the horn. The amendments to claim 10 require that radiating ends of ports connecting into the horn be located along a surface of the horn defining its wave guide portion.

Claim 16 is a more radical restatement of the invention, and is intended to define the invention in terms of a line of outlets from ports disposed along an interior wall of a horn with the array aligned along (i.e. substantially parallel to) the center axis of the horn. This arrangement is shown in the figures and paragraph [0020]. The acoustic transducers do not radiate directly into the horn but connected by pre-load chambers and ports to the horn.

Reference to Fig. 4 of the Danley '759 patent illustrates very clearly that Danley cannot anticipate the amended independent claims or the newly added claims. Danley '759 does not provide loudspeakers or ports disposed along the side walls of the waveguide, but only at the base end of the structure, notwithstanding arrangement of the loudspeakers in a line array. The speakers are not located at successive points of increasing cross sectional area along the waveguide, as required in claims 1 and 10. The line array is perpendicular to the central axis of the horn, not substantially parallel as required in claim 16. The speakers have central axes parallel to the direction of sound propagation in the waveguide, not locally transverse thereto as required of the radiating ports in claim 16.



The new structural limitations clearly support the functional differences between

the present invention and the devices taught by the Danley '759 reference. Danley states that "the effective size and spacing between the sound sources along the line is also critical. The spacing and effective size in this direction *must* be such as to allow adjacent sound *dispersion patterns* to overlap and complement each other." (Emphasis supplied) As has already been noted, such factors are utterly irrelevant to the present invention. Danley is a variation on a traditional line array which exhibits both constructive and destructive interference to produce a steerable output (see Danley '759, col. 3, ln. 1-15) and adding a horn for some embodiments. The present invention is directed to inserting sound from a line like array of ports which is disposed extending along the waveguide of a horn to achieve high output energy. This differs from conventional line arrays where the alignment of the speakers is used to achieve beam narrowing. Dispersion patterns are of no consequence because there is no use of destructive interference to narrow the beam.

The remaining dependent claims recite still further elements distinguishing the invention over the prior art.

Applicant believes the Claims are in condition for allowance and respectfully requests favorable action by the Examiner.

Respectfully submitted,

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